Application No.: 10/715,525

Attorney Docket No.: 08009.0008-00

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

Claim 1. (Currently Amended) An active material for a positive electrode of a lithium secondary battery, comprising a lithium-nickel composite oxide of the general formula Li<sub>x</sub>(Ni<sub>1-y</sub>Co<sub>y</sub>)<sub>1-z</sub>M<sub>z</sub>O<sub>2</sub>, where:

 $0.98 \le x \le 1.10$ ;

 $0.05 \le y \le 0.4$ ;

 $0.01 \le z \le 0.2$ ; and

M is chosen from at least one element selected from the group of Al, Zn, Ti, and Mg; wherein:

a. according to Rietveld analysis, the Li site occupancy rate for Li sites in a crystal of the lithium-nickel composite oxide is 98% or greater;

b. the average particle size of spherical secondary particles of the lithium-nickel composite oxide ranges from 5  $\mu$ m to 15  $\mu$ m; and

c. when the active material is subjected to a washing process, the difference between the specific surface area of the active material before the washing process and after the washing process is 1.07 m<sup>2</sup>/g or less.

An active material for positive electrode of a lithium secondary battery, which is expressed by the general formula  $\text{Li}_x(\text{Ni}_{1-y}\text{Co}_y)_{1-z}\text{M}_z\text{O}_2$  (where  $0.98 \le x \le 1.10, 0.05 \le y \le 0.4, 0.01 \le z \le 0.2$ , M = at least one element selected from the group of Al, Zn, Ti, and Mg), wherein according to Rietveld analysis, the Li site occupancy rate for the Li site in

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the crystal is 98% or greater, and the average particle size of the spherical secondary particles is 5  $\mu$ m to 15  $\mu$ m.

Claim 2. (cancelled)

Claim 3. (Currently Amended)) A lithium secondary battery <u>comprisingusing</u> the active material claims in claim 1-or-2 for the positive electrode.